

AF-1 - Promote Production of Biomass Fuels

This option includes promoting the production of ethanol, biomass, biodiesel, cellulosic ethanol, and other bio-fuels.

Benefit/Cost of Reducing CO₂e:

Arizona: 28 MMt between 2007-2020; 2.4% of 2020 emissions; \$0/ton
New Mexico: 9.8 MMt between 2007-2020; 1.3% of 2020 emissions; \$3/ton
Colorado: 0.1-1 MMt or more; \$5-50/ton; includes starch and cellulosic processes

Assessment: High Priority. Bin B. 20 out of 22 votes.

Further research and development for biofuels to examine Utah's potential to produce and/or manufacture low-carbon, ag-based fuels and energy resources is critical. There is a need for more information and R&D of all biofuels (high priority), but actual implementation in near term is limited (medium priority). Water usage is an important constraint.

The Utah Biodiesel Cooperative reports that biodiesel produces a 78% reduction in GHG per unit of fuel. UDOT and Utah State University are currently undertaking an experiment along Utah's highways to grow biodiesel feedstocks, which will be converted into biodiesel fuel, possibly meeting UDOT's entire fleet needs.

Ethanol: little corn is grown in Utah; cellulosic ethanol depends on future technology.

Feedstocks discussed for biofuel production in Utah included:

- Algae,
- Oil-producing plants,
- Manure,
- Switchgrass, and
- Pinyon-Juniper woodlands.